AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1.   (Currently amended) A method performed by an intermediate entity for transparently handling communications between a client and a destination, comprising:

~~analyzing a client communication from the client that is addressed to a destination; and~~

~~attempting to set up a connection with the destination.~~

establishing communication sessions between the client and the intermediate entity, and the destination and the intermediate entity;

receiving a first packet from the client including data and a client address corresponding to the client;

determining a destination address corresponding to the destination based on the client address;

creating a second packet including the data and the destination address;

sending the second packet to the destination using the destination address;

receiving a response from the destination including the destination address;

determining a client address corresponding to the client based on the destination address; and

sending the response to the client using the client address.

2.   (Currently amended) The method of claim 1, further including:

determining whether the destination is a first type of destination or a second type of destination;

forwarding the ~~client communication~~first packet to the destination if the destination is a first type of destination; and

performing the ~~step of attempting to set up a connection with the destination~~steps of determining a destination address, creating a second packet, and sending the second packet if the destination is a second type of destination.

3.   (Currently amended) The method of claim 1, wherein establishing communication sessions further ~~including~~includes:

sending to the client a connection setup acknowledgment having the destination address ~~of the destination~~ in ~~the~~a source field in response to a connection setup acknowledgment received from the destination.

4.   (Currently amended) The method of claim 1, wherein determining a destination address includes~~further including:storing~~ accessing a table including information associating the client and the destination addresses; and

wherein determining a client address includes accessing the table including information associating the client and the destination addresses.

5.   (Currently amended) The method of claim 4, ~~further including:~~ wherein accessing the table includes:

using the client address to locate the destination address in the table; and

using the destination address to locate the client address in the table.

~~creating a communication to the destination using the information associating the~~ ~~client and the destination in response to a service request from the client.~~

6. (Currently amended) The method of claim [[4]]5, wherein the destination address and the client address are stored in the table when the communication sessions are established. ~~further including:~~

~~creating a communication to the client using the information associating the client~~ ~~and the destination in response to a destination communication from the destination.~~

7. (Currently amended) The method of claim [[A]]1, further including:

reading ~~ana~~ a destination address ~~of the destination~~ from a destination field of the client communication; and

preparing an intermediate communication having a source field, a destination field, and a temporary field, the preparing including:

~~by~~ storing a client address in the source field;

storing the destination address ~~of the destination~~ in a temporary field; and

~~by~~ storing ~~the~~ an intermediate destination address ~~of an intermediate~~ ~~destination~~ in the destination field.

8. (Currently amended) The method of claim 1, further including:

determining whether the ~~client communication~~ first packet includes ~~is~~ a connection setup request; and

storing the address of an intermediate destination in a destination field ~~in response to a determination~~when the client communication is not a connection setup request.

9.   (Original) The method of claim 1, further including:

performing a service at the intermediate entity in response to a service request from the client.

10.   (Currently amended) The method of claim 9, further including:

preparing a ~~communication to~~third packet for the client based on performance of the service and including the destination address ~~of the destination~~ in ~~the~~a source field of the third packet.

11.   (Currently amended) An intermediate entity for transparently handling communications between a client and a destination, comprising:

~~means for analyzing a client communication from the client that is addressed to a destination; and~~

~~means for attempting to set up a connection with the destination.~~

means for establishing communication sessions between the client and the intermediate entity and the destination and the intermediate entity;

means for receiving a first packet from the client including data and a client address corresponding to the client;

means for determining a destination address corresponding to the destination based on the client address;

means for creating a second packet including the data and the destination address;

means for sending the second packet to the destination using the destination address;

means for receiving a response from the destination including the destination address;

means for determining a client address corresponding to the client based on the destination address; and

means for sending the response to the client using the client address.

12.   (Currently amended) The intermediate entity of claim 11, further comprising:

means for determining whether the destination is a first type of destination or a second type of destination;

means for forwarding the client communicationfirst packet to the destination if the destination is a first type of destination; and

wherein the means for attempting to set up a connection attempts to set up a connection in response to the means for determining making a determination that determining a destination address, creating a second packet, and sending the second packet perform said functions if the destination is a second type of destination.

13. (Currently amended) The intermediate entity of claim 11, <u>wherein the means for establishing communication sessions</u> further ~~comprising~~<u>comprises</u>:

means for sending to the client a connection setup acknowledgment having the <u>destination address</u> ~~of the destination~~ in ~~the~~<u>a</u> source field in response to a connection setup acknowledgment <u>received</u> from the destination.

14. (Currently amended) The intermediate entity of claim 11, <u>wherein the means for determining a destination address comprises</u>~~further comprising:~~ means for ~~storing~~<u>accessing</u> a table including information associating the client and the destination<u> </u>addresses<u>; and</u>

<u>wherein the means for determining a client address comprises means for accessing the table including information associating the client and the destination addresses</u>.

15. (Currently amended) The intermediate entity of claim 14, ~~further comprising:~~<u>wherein the means for accessing the table comprises</u>:

means for using the client address to locate the destination address in the table<u>; and</u>

<u>means for using the destination address to locate the client address in the table.</u> ~~means for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.~~

16.   (Currently amended) The intermediate entity of claim ~~14~~15, wherein the destination address and the client address are stored in the table when the communication sessions are established. ~~further comprising:~~

~~means for creating a communication to the destination using the information associating the client and the destination in response to a destination communication from the destination.~~

17.   (Currently amended) The intermediate entity of claim 11, further comprising:

means for reading ~~ana~~ destination address ~~of the destination~~ from a destination field of the client communication; and

means for preparing an intermediate communication having a source field, a destination field, and a temporary field, the means for preparing including:

~~by~~ means for storing a client address in the source field;

means for storing the destination address ~~of the destination~~ in ~~a~~the temporary field; and

~~by~~ means for storing ~~the~~an intermediate destination address ~~of an intermediate destination~~ in the destination field.

18.   (Currently amended) The intermediate entity of claim 11, further comprising:

means for determining whether the ~~client communication~~first packet includes ~~is~~ a connection setup request; and

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means for storing the address of an intermediate destination in a destination field in response to a determination thatwhen the client communication is not a connection setup request.

19. (Original) The intermediate entity of claim 11, further comprising:

means for performing a service at the intermediate entity in response to a service request from the client.

20. (Currently amended) The intermediate entity of claim 19, further comprising:

means for preparing a communication tothird packet for the client based on performance of the service and including the destination address of the destination in thea source field of the third packet.

21. (Currently amended) An intermediate entity for transparently handling communications between a client and a destination, comprising:

an analyzing element for analyzing a client communication from the client that is addressed to a destination; and

a connection setup element for attempting to set up a connection with the destination.

a communication session establishing element for establishing communication sessions between the client and the intermediate entity and the destination and the intermediate entity;

a packet receiving element for receiving a first packet from the client including data and a client address corresponding to the client;

a destination address determining element for determining a destination address corresponding to the destination based on the client address;

a packet creating element for creating a second packet including the data and the destination address;

a packet sending element for sending the second packet to the destination using the destination address;

a response receiving element for receiving a response from the destination including the destination address;

a client address determining element for determining a client address corresponding to the client based on the destination address; and

a response sending element for sending the response to the client using the client address.

22.   (Currently amended) The intermediate entity of claim 21, further comprising:

a determining element for determining whether the destination is a first type of destination or a second type of destination;

a forwarding element for forwarding the client communicationfirst packet to the destination if the destination is a first type of destination; and

wherein the connection setup element attempts to set up a connection in response to the determining element making a determination thatdestination address

determining element, the packet creating element, and the packet sending element perform said functions if the destination is a second type of destination.

23. (Currently amended) The intermediate entity of claim 21, wherein the communication session establishing element further ~~comprising~~comprises:

a connection setup element for sending to the client a connection setup acknowledgment having the destination address ~~of the destination~~ in ~~the~~a source field in response to a connection setup acknowledgment received from the destination.

24. (Currently amended) The intermediate entity of claim 21, wherein the destination address determining element comprises~~further comprising: an association creating element for storing~~ a table accessing element for accessing a table including information associating the client and the destination addresses; and

wherein the client address determining element comprises a table accessing element for accessing the table including information associating the client and the destination addresses.

25. (Currently amended) The intermediate entity of claim 24, ~~further comprising~~wherein the table accessing element comprises:

a destination address locating element for using the client address to locate the destination address in the table; and

a client address locating element for using the destination address to locate the client address in the table.

a destination communication creation element for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

26.   (Currently amended) The intermediate entity of claim ~~24~~25, wherein the destination address and the client address are stored in the table when the communication sessions are established.~~further comprising:~~

~~a client communication creation element for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.~~

27.   (Currently amended) The intermediate entity of claim 21, further comprising:

a reading element for reading ~~an~~a destination address ~~of the destination~~ from a destination field of the client communication; and

an intermediate communication preparation element for preparing an intermediate communication having a source field, a destination field, and a temporary field, the intermediate communication preparation element including:

~~by~~an element for storing a client address in the source field,

an element for storing the destination address ~~of the destination~~ in ~~a~~the temporary field, and

~~by~~an element for storing ~~the~~an intermediate destination address ~~of an intermediate destination~~ in the destination field.

28.   (Currently amended) The intermediate entity of claim 21, further comprising:

a connection setup request determining element for determining whether the ~~client communication~~first packet includes ~~is~~a connection setup request; and

an address storing element for storing the address of an intermediate destination in a destination field ~~in response to a determination that~~when the client communication is not a connection setup request.

29.   (Original) The intermediate entity of claim 21, further comprising:

a service performance element for performing a service at the intermediate entity in response to a service request from the client.

30.   (Currently amended) The intermediate entity of claim ~~28~~29, further comprising:

a client packet preparation element for preparing a ~~communication to~~third packet for the client based on performance of the service and including the destination address ~~of the destination~~ in the~~a~~ source field of the third packet.

31.   (Currently amended) A computer program product comprising:

a computer usable medium having computer readable code embodied therein for transparently handling communications between a client and a destination, the ~~computer usable medium~~comprising:

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~~a module for analyzing a client communication from the client that is addressed to a destination; and~~

~~a module for attempting to set up a connection with the destination.~~

a module for establishing communication sessions between the client and the intermediate entity and the destination and the intermediate entity;

a module for receiving a first packet from the client including data and a client address corresponding to the client;

a module for determining a destination address corresponding to the destination based on the client address;

a module for creating a second packet including the data and the destination address;

a module for sending the second packet to the destination using the destination address;

a module for receiving a response from the destination including the destination address;

a module for determining a client address corresponding to the client based on the destination address; and

a module for sending the response to the client using the client address.

32.   (Currently amended) The computer program product of claim 31, further comprising:

~~a module for determining whether the destination is a first type of destination or a second type of destination;~~

a module for forwarding the ~~client communication~~first packet to the destination if the destination is a first type of destination; and

wherein the ~~module~~modules for ~~attempting to set up a connection~~ attempts to set up a connection in response to the module for determining making a determination that~~determining~~ a destination address, creating a second packet, and sending the second packet will perform said functions if the destination in a second type of destination.

33.   (Currently amended) The computer program product of claim 31, wherein the module for establishing communication sessions further ~~comprising~~comprises:

a module for sending to the client a connection setup acknowledgment having the destination address ~~of the destination~~ in ~~the~~a source field in response to a connection setup acknowledgment received from the destination.

34.   (Currently amended) The computer program product of claim 31, wherein the module for determining a destination address comprises~~further comprising:~~ a module for ~~storing~~accessing a table including information associating the client and the destination addresses; and

wherein the module for determining a client address comprises a module for accessing the table including information associating the client and the destination addresses.

35. (Currently amended) The computer program product of claim 34, <u>wherein the module for accessing the table comprises</u><s>further comprising</s>:

<u>a module for using the client address to locate the destination address in the table; and</u>

<u>a module for using the destination address to locate the client address in the table.</u>

<s>a module for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.</s>

36. (Currently amended) The computer program product of claim <s>34</s><u>35</u>, wherein <u>the destination address and the client address are stored in the table when the communication sessions are established.</u><s>further comprising:</s>

<s>a module for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.</s>

37. (Currently amended) The computer program product of claim 31, further comprising:

a module for reading <s>an</s><u>a destination</u> address <s>of the destination</s> from a destination field of the client communication; and

a module for preparing an intermediate communication <u>having a source field, a destination field, and a temporary field, the module for preparing including:</u>

by a module for storing a client address in the source field;

a module for storing the destination address of the destination in a~~the~~ temporary field~~;~~ and

by a module for storing ~~the~~an intermediate destination address ~~of an intermediate destination~~ in the destination field.

38.   (Currently amended) The computer program product of claim 31, further comprising:

a module for determining whether the ~~client communication~~first packet includes ~~is~~ a connection setup request; and

a module for storing the address of an intermediate destination in a destination field ~~in response to a determination that~~when the client communication is not a connection setup request.

39.   (Original) The computer program product of claim 31, further comprising:

a module for performing a service at the intermediate entity in response to a service request from the client.

40.   (Currently amended) The computer program product of claim 39, further comprising:

a module for preparing a ~~communication to~~third packet for the client based on performance of the service and including the destination address ~~of the destination~~ in ~~the~~a source field of the third packet.

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41.   (Currently amended) A method for transparently handling communications between a client and a destination, comprising:

sending a client communication addressed to a destination from a client to an intermediate entity;

analyzing the client communication from the client that is addressed to a destination;

reading a destination address from a destination field of the client communication;

preparing an intermediate communication having a source field, a destination field, and a temporary field, the preparing including:

storing a client address in the source field;

storing the destination address in the temporary field; and

storing an intermediate destination address in the destination field;

transmitting a connection setup communication to the destination to set upfor establishing a connection withbetween the destination and the intermediate entity; and

receiving the connection setup communication at the destination.

receiving a connection setup acknowledgement communication from the destination; and

associating the destination address with the client address.

42.   (Currently amended) The method of claim 41, further including:

~~determining whether the destination is a first type of destination or a second type of destination;~~

forwarding the client communication to the destination if the destination is a first type of destination; and

performing the ~~step of attempting to set up a connection with the destination~~<u>steps of preparing an intermediate communication and transmitting a connection setup communication</u> if the destination is a second type of destination.

43.   (Currently amended) The method of claim 41, further including:

sending to the client a connection setup acknowledgment having the <u>destination address</u>~~of the destination~~ in the source field in response to <u>a</u>~~a~~<u>the</u> connection setup acknowledgment <u>received</u> from the destination.

44.   (Currently amended) The method of claim 41, <u>wherein associating includes</u>~~further including~~:

storing information associating the client<u>address</u> ~~and~~<u>with</u> the destination <u>address</u>.

45.   (Currently amended) The method of claim ~~41~~<u>44</u>, further including:

creating a communication to the destination using the information associating the client and the destination <u>addresses</u> in response to a ~~service~~ request from the client.

46.   (Currently amended) The method of claim 44, further including:

creating a communication to the client using the information associating the client

and the destination addresses in response to a destination communication from the

destination.

47.   (Cancelled).

48.   (Currently amended) The method of claim 41, further including:

determining whether the client communication is a connection setup request; and

storing the intermediate entity address of an intermediate destination in a

destination field in response to a determination that the client communication is not a

connection setup request.

49.   (Original) The method of claim 41, further including:

performing a service at the intermediate entity in response to a service request

from the client.

50.   (Currently amended) The method of claim 49, further including:

preparing a communication to the client based on performance of the service and

including the destination address of the destination in the source field.

51.   (Currently amended) A system for transparently handling communications

between a client and a destination, comprising:

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means for ~~transmitting~~sending a client communication addressed to a destination from a client to an intermediate entity;

means for analyzing the client communication ~~from the client that is addressed to a destination~~;

means for reading a destination address from a destination field of the client communication;

means for preparing an intermediate communication having a source field, a destination field, and a temporary field, the means for preparing including:

means for storing a client address in the source field;

means for storing the destination address in the temporary field; and

means for storing an intermediate destination address in the destination field;

means for transmitting a connection setup communication to the destination ~~to set up~~for establishing a connection ~~with~~between the destination and the intermediate entity; ~~and~~

~~means for receiving the connection setup communication at the destination.~~

means for receiving a connection setup acknowledgement communication from the destination; and

means for associating the destination address with the client address.

52. (Currently amended) The system of claim 51, further comprising:

~~means for determining whether the destination is a first type of destination or a second type of destination;~~

means for forwarding the client communication to the destination if the destination is a first type of destination; and

wherein the means for ~~attempting to set up a connection attempts to set up a connection in response to the means for determining making a determination that~~preparing an intermediate communication and transmitting a connection setup communication perform said functions if the destination is a second type of destination.

53.   (Currently amended) The system of claim 51, further comprising:

means for sending to the client a connection setup acknowledgment having the destination address ~~of the destination~~ in the source field in response to ~~a~~the connection setup acknowledgment received from the destination.

54.   (Currently amended) The system of claim 51, wherein the means for associating comprises~~further comprising~~:

means for storing information associating the client address ~~and~~with the destination address.

55.   (Currently amended) The system of claim 54, further comprising:

means for creating a communication to the destination using the information associating the client and the destination addresses in response to a ~~service~~ request from the client.

56. (Currently amended) The system entity of claim 54, further comprising:

means for creating a communication to the client using the information

associating the client and the destination addresses in response to ~~the~~a ~~destination~~

communication from the destination.

57. (Cancelled).

58. (Currently amended) The system of claim 51, further comprising:

means for determining whether the client communication is a connection setup

request; and

means for storing the intermediate entity address ~~of an intermediate destination~~

in a destination field in response to a determination that the client communication is not

a connection setup request.

59. (Original) The system of claim 51, further comprising:

means for performing a service at the intermediate entity in response to receiving

a service request from the client.

60. (Currently amended) The system of claim 59, further comprising:

means for preparing a communication to the client based on performance of the

service and including the destination address ~~of the destination~~ in the source field.

61.   (Currently amended) A system for transparently handling communications between a client and a destination, comprising:

~~an analyzing element for analyzing a client communication from the client that is addressed to a destination; and~~

~~a connection setup element for attempting to set up a connection with the destination.~~

a sending element for sending a client communication addressed to a destination from a client to an intermediate entity;

an analyzing element for analyzing the client communication;

a reading element for reading a destination address from a destination field of the client communication;

an intermediate communication preparation element for preparing an intermediate communication having a source field, a destination field, and a temporary field, the intermediate communication preparation element including:

an element for storing a client address in the source field,

an element for storing the destination address in the temporary field, and

an element for storing an intermediate destination address in the destination field;

a transmitting element for transmitting a connection setup communication to the destination for establishing a connection between the destination and the intermediate entity;

a receiving element for receiving a connection setup acknowledgement communication from the destination; and

an associating element for associating the destination address with the client address.

62.   (Currently amended) The system of claim 61, further comprising:

a determining element for determining whether the destination is a first type of destination or a second type of destination; and

a forwarding element for forwarding the client communication to the destination if the destination is a first type of destination; and

wherein the connection setup element attempts to set up a connection in response to the determining element making a determination that intermediate communication preparation element and the transmitting element perform said functions if the destination is a second type of destination.

63.   (Currently amended) The system of claim 61, further comprising:

a client connection setup acknowledgment element for sending to the client a connection setup acknowledgment having the destination address of the destination in the source field in response to athe connection setup acknowledgment received from the destination.

64.   (Currently amended) The system of claim 61, wherein the associating element comprisesfurther comprising:

a storing element for storing information associating the client address with and the destination address.

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65.   (Currently amended) The system of claim 64, further comprising:

a destination communication creating element for creating a communication to the destination using the information associating the client and the destination addresses in response to a ~~service~~ request from the client.

66.   (Currently amended) The system of claim 64, further comprising:

a client communication creation element for creating a communication to the client using the information associating the client and the destination addresses in response to ~~the~~a ~~destination~~ communication from the destination.

67.   (Cancelled).

68.   (Currently amended) The system of claim 61, further comprising:

a connection setup determining element for determining whether the client communication is a connection setup request; and

a storing element for storing the intermediate entity address ~~of an intermediate destination~~ in a destination field in response to a determination that the client communication is not a connection setup request .

69.   (Original) The system of claim 61, further comprising:

a service element for performing a service at the intermediate entity in response ~~to a service request from the client.~~

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70.   (Currently amended) The system of claim 69, further comprising:

a client communication preparation element for preparing a communication to the client based on performance of the service and including the destination address of the destination in the source field.

71.   (Currently amended) A computer program product comprising:

a computer usable medium having computer readable code embodied therein for transparently handling communications between a client and a destination, the computer usable medium comprising:

a module for analyzing a client communication from the client that is addressed to a destination; and

a module for attempting to set up a connection with the destination.

a module for sending a client communication addressed to a destination from a client to an intermediate entity;

a module for analyzing the client communication;

a module for reading a destination address from a destination field of the client communication;

a module for preparing an intermediate communication having a source field, a destination field, and a temporary field, the module for preparing including:

a module for storing a client address in the source field,

a module for storing the destination address in the temporary field, and

a module for storing an intermediate destination address in the destination field;

a module for transmitting a connection setup communication to the destination for establishing a connection between the destination and the intermediate entity;

a module for receiving a connection setup acknowledgement communication from the destination; and

a module for associating the destination address with the client address.

72.   (Currently amended) The computer program product of claim 71, further comprising:

a module for determining whether the destination is a first type of destination or a second type of destination;

a module for forwarding the client communication to the destination if the destination is a first type of destination; and

wherein the modulemodules for attempting to set up a connection attempts to set up a connection in response to the determining module making a determination thatpreparing an intermediate communication and transmitting a connection setup communication perform said functions if the destination is a second type of destination.

73.   (Currently amended) The computer program product of claim 71, further comprising:

a module for sending to the client a connection setup acknowledgment having the destination address ~~of the destination~~ in the source field in response to a~~the~~ connection setup acknowledgment received from the destination.

74.   (Currently amended) The computer program product of claim 71, wherein the module for associating comprises~~further comprising~~:

a module for storing information associating the client address and~~with~~ the destination address.

75.   (Currently amended) The computer program product of claim 74, further comprising:

a module for creating a communication to the destination using the information associating the client and the destination addresses in response to a ~~service~~ request from the client.

76.   (Currently amended) The computer program product of claim 74, further comprising:

a module for creating a communication to the client using the information associating the client and the destination addresses in response to the~~a~~ ~~destination~~ communication from the destination.

77.   (Cancelled).

78.   (Currently amended) The computer program product of claim 71, further comprising:

a module for determining whether the client communication is a connection setup request; and

a module for storing the intermediate entity address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

79.   (Original) The computer program product of claim 71, further comprising:

a module for performing a service at the intermediate entity in response to a service request from the client.

80.   (Currently amended) The computer program product of claim 79, further comprising:

a module for preparing a communication to the client based on performance of the service and including the destination address of the destination in the source field.